## INDIANA DEPARTMENT OF TRANSPORTATION



## INTER-DEPARTMENT COMMUNICATION Standards Section C Room N642



Writer's Direct Line 232-6775

October 6, 2000

## DESIGN MEMORANDUM No. 00-16 TECHNICAL ADVISORY

TO: All Design, Operations, District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich

Anthony L. Uremovich

Acting Design Policy Engineer
Contracts and Construction Division

**SUBECT:** Riprap Ditches

**EFFECTIVE:** Immediately

Design Manual Section 30-3.03(02) item 4 shows that riprap should be used on ditches with grades of 3% or steeper, and 10% or flatter. However, riprap should be used on slopes steeper than 10% at bridge cones. It is also appropriate to use riprap in a ditch where the grade is flatter than 3%. For example, if there is a hill in the watershed of the ditch, riprap should be placed to dissipate energy and minimize ditch erosion.

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